

TUNABLE OPTICAL ADD-DROP MULTIPLEXER BASED ON SOI WAFER AND MANUFACTURING METHOD THEREOF

ABSTRACT OF THE DISCLOSURE

A tunable optical add-drop multiplexer (OADM) based on an SOI (silicon-on-insulator) wafer is disclosed. The tunable OADM includes a multimode interference region, at least a grating formed on the multimode interference region, and at least two electrodes formed on two sides of the multimode interference region and having carriers induced thereinto, thereby a variation of an optical waveguide in the grating is controlled through controlling the carriers induced into the electrodes so as to further control different propagation of wavelength signals.